AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-22. (Canceled)

23. (Currently Amended) A vehicle auxiliary electric-power-supplying system comprising:

an electric power inverter for converting first dc power received through an overhead wire to second dc power, and supplying the second **[[**type of**]]** dc power to a dc load;

an electric power supplier for converting the first dc power received through the overhead wire to third dc power;

a power-outputting unit, connected to both the electric power inverter and the electric power supplier, for outputting higher dc power of either the second dc power or the third dc power; and

a controller for receiving power from the power-outputting unit, and controlling the electric power inverter,

wherein the electric power inverter comprises a charging switch that controls current flowing through the overhead wire, and controls the conversion of the first dc power to the second dc power based on the control signals output from the controller.

24. (Previously Presented) The vehicle auxiliary electric-power-supplying system as recited in claim 23, wherein the electric power inverter converts the first dc power into ac power, and supplies the ac power to an ac load.

25. (Previously Presented) The vehicle auxiliary electric-power-supplying system as recited in claim 23, wherein the power-outputting unit supplies the third dc power the to the controller when the system starts to operate, and the second dc power is supplied through the power-outputting unit after the second dc power has been outputted from the electric power inverter.

26. (Previously Presented) The vehicle auxiliary electric-power-supplying system as recited in claim 25, wherein the electric power inverter converts the first dc power into ac power, and supplies the ac power to an ac load.

27. (Previously Presented) The vehicle auxiliary electric-power-supplying system as recited in claim 25, wherein the third dc power is supplied to the controller through the power-outputting unit if the voltage of the second dc power being supplied becomes lower than the voltage of the third dc power being supplied.

28. (Previously Presented) The vehicle auxiliary electric-power-supplying system as recited in claim 27, wherein the electric power inverter converts the first dc power into ac power, and supplies the ac power to an ac load.

29. (Previously Presented) The vehicle auxiliary electric-power-supplying system as recited in claim 27, wherein the power-outputting unit is comprises a butt-jointed diode composed of a first diode to which the second dc power is supplied and a second diode to which the third dc power is supplied, so as to supply output of either power to the controller.

30. (Previously Presented) The vehicle auxiliary electric-power-supplying system as recited in claim 29, wherein the electric power inverter converts the first dc power into ac power, and supplies the ac power to an ac load.

31. (Previously Presented) The vehicle auxiliary electric-power-supplying-system as recited in claim 29, further comprising:

a protector, connected between the overhead wire and the electric power inverter, for protecting the electric power inverter against the dc power supplied through the overhead wire.

32. (Previously Presented) The vehicle auxiliary electric-power-supplying system as recited in claim 31, wherein the electric power inverter converts the first dc power into ac power, and supplies the ac power to an ac load.

33. (Previously Presented) The vehicle auxiliary electric-power-supplying system as recited in claim 31, wherein the first dc power is supplied to the electric power supplier through the protector.

34. (Previously Presented) The vehicle auxiliary electric-power-supplying system as recited in claim 33, wherein the electric power inverter converts the first dc power into ac power, and supplies the ac power to an ac load.